Attorney Docket No. 406788002US

Amendments to the Claims:

Please amend claims 1-4, 7-12, 16-22, 25, and 26, and add new claim 29. Following is a complete listing of the claims pending in the application, as amended:

- 1. (Currently amended) A method for calibrating a visual display, the method comprising:
 - (a) analyzing a visual display module, the module comprising an array of pixels and corresponding subpixels;
 - (b) locating and registering multiple subpixels of the visual display module;
 - (<u>bc</u>) determining a chromaticity value and a luminance value for each registered subpixel;
 - (d) converting the chromaticity and luminance value for each registered subpixel value to tristimulus values;
 - (e) converting a target chromaticity value and a target luminance value for a given color to tristimulus values;
 - (f) calculating correction factors for each registered subpixel based on a difference between the measured tristimulus values and the target tristimulus values; and
 - (g) sending the correction factors to the visual display module.
 - (c) adjusting the chromaticity value and the luminance value for each pixel to correspond with a standard chromaticity value and a standard luminance value for a given color; and
 - (d) calibrating the visual display module with the adjusted pixel values.
 - 2. (Currently amended) The method of claim 1, further comprising:
 - (eh) setting the visual display module image to the color red;
 - (fi) repeating steps (a) to (ef); and
 - (gi) repeating steps (eh) and (fi) with the visual display sign image set to green, blue, and white.

- 3. (Currently amended) The method of claim 1 wherein the <u>sub</u>pixels are light-emitting diodes.
- 4. (Currently amended) The method of claim 1 wherein the process in step (bc) for determining the chromaticity value and luminance value for each <u>sub</u>pixel includes the use of an imaging colorimeter.
 - 5. (Cancelled)
 - 6. (Cancelled)
- 7. (Currently amended) The method of claim 1 wherein the process in step (dg) for calibrating the visual display module further sending the correction factors to the visual display module comprises uploading the corrected subpixel values to firmware and/or software controlling the visual display module.
- 8. (Currently amended) The method of claim 1 wherein steps (a) to (dg) take place within a test station.
- 9. (Currently amended) The method of claim 1 wherein steps (a) to (eq) take place in a darkroom.
- 10. (Currently amended) A method for calibrating a visual display, the method comprising:
 - (a) analyzing a portion of a visual display module, the portion comprising an array of pixels and corresponding subpixels;
 - (b) locating and registering multiple subpixels within the array
 - (<u>bc</u>) determining a chromaticity value and a luminance value for each registered subpixel within the array;
 - (ed) storing the chromaticity value and the luminance value for each <u>sub</u>pixel;

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- (de) repeating steps (a) to (ed) for each portion of the visual display module until all portions of the visual display module have been analyzed;
- (f) converting the chromaticity value and luminance value for each measured subpixel to tristimulus values;
- (g) converting a target chromaticity value and a target luminance value for a given color to tristimulus values;
- (h) calculating correction factors for each subpixel based on a difference between the measured tristimulus values and the target tristimulus values;
- (e) after all of the pixels have been read, calculating correction factors for each pixel so that each pixel will display the same color;
- (fi) applying the correction factors to the stored chromaticity and luminance values for each <u>sub</u>pixel; and
- (gi) calibrating the visual display module with the corrected <u>sub</u>pixel values.
- 11. (Currently amended) The method of claim 10, further comprising:
- (hk) setting the visual display module to project the color red;
- (il) repeating steps (a) to (fi); and
- (\underline{im}) repeating steps (\underline{hk}) and (\underline{il}) with the visual display module set to green, blue, and white.
- 12. (Currently amended) The method of claim 10 wherein the <u>sub</u>pixels are light-emitting diodes.
- 13. (Previously Presented) The method of claim 10 wherein the pixels are pixels of a liquid crystal display (LCD).
 - 14. (Cancelled)
 - 15. (Cancelled)

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16. (Currently amended) The method of claim 10 wherein the process in step (bc) for determining the chromaticity value and luminance value for each registered subpixel includes the use of an imaging colorimeter.

- 17. (Currently amended) The method of claim 10 wherein the process in step (ed) for storing the chromaticity value and luminance value for each <u>sub</u>pixel comprises storing the data in a database.
- 18. (Currently amended) The method of claim 10 wherein the process in step (eh) for calculating correction factors for each subpixel includes processing the data using a computer and software.
- 19. (Currently amended) The method of claim 10 wherein the process in step (gj) for calibrating the visual display module further comprises uploading the corrected subpixel values to firmware and/or software controlling the visual display panel.
- 20. (Currently amended) The method of claim 10 wherein steps (a) to (gj) take place within a test station.
- 21. (Currently amended) The method of claim 10 wherein steps (a) to (gj) take place in a darkroom.
- 22. (Currently amended) An apparatus for analyzing and calibrating a visual display, comprising:
 - means for capturing an image from a portion of the visual display module positioned within a testing station;
 - means for determining a chromaticity and a luminance value for each of a plurality of <u>sub</u>pixels from the captured image;-and
 - means for converting the chromaticity values and luminance values for each of the subpixels to tristimulus values;

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means for converting a target chromaticity value and a target luminance value for a given color to tristimulus values; and

means for adjusting the chromaticity and luminance tristimulus values of for each subpixel to correspond with a standard value of chromaticity and luminance for a given colorthe target tristimulus values.

- 23. (Original) The apparatus of claim 22 wherein the means for capturing the image comprises a CCD digital camera and lens.
- 24. (Original) The apparatus of claim 22 wherein the means for capturing the image comprises a CMOS digital camera and lens.
- 25. (Currently amended) The apparatus of claim 22 wherein the means for determining the chromaticity and the luminance values for a plurality of <u>sub</u>pixels comprises software loaded in an interface, the interface being operably coupled to both the capturing means and the visual display <u>signmodule</u>.
- 26. (Currently amended) The apparatus of claim 22 wherein the means for adjusting the chromaticity and the luminance tristimulus values of for each of a plurality of subpixels comprises software for calculating a set of correction factors to be applied to each subpixel and uploading the correction factors to the visual display module.
 - 27. (Cancelled)
 - 28. (Cancelled)
- 29. (New) The method of claim 1 wherein sending the correction factors to the visual display module comprises calibrating the module with the adjusted subpixel values.